UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

KIMBERLY Y. LAFAVE, et al.	)	
	)	
Plaintiffs	)	
	)	
v.	)	Case No. 1:23-cv-1605 (CMH/JFA)
	)	
THE COUNTY OF FAIRFAX, VIRGINIA,	)	
and KEVIN DAVIS, in his Official Capacity	)	
as Chief of Police	)	
	)	
Defendants	)	
	)	

<u>DECLARATION OF KARA FITZGIBBON</u>

I, Kara Fitzgibbon, provide this declaration in support of the Opposition to the Motion for Preliminary Injunction filed by Plaintiffs. I declare and state as follows:

1.   I am the Director of the Center for Survey Research ("CSR") for the Weldon Cooper Center for Public Service at the University of Virginia. I have held this position since 2019.

2.   The CSR brings the best tools of social science and academic rigor to the service of governments, organizations, and researchers across Virginia and nationwide. As a full-service survey center, CSR offers customized project design, professional interviewing, data collection, data analysis, and report preparation.

3.   As the director of CSR, I

- Prepare project proposals and budgets; meet with prospective clients to develop study design recommendations; maintain persistent output of proposals;
- Oversee the fiscal management of CSR, including review of monthly invoices and monitoring of project budgets;
- Lead strategic planning and development of annual unit goals; maintain alignment of CSR vision and projects with Cooper Center strategic plan;

1

- Recruit, hire, and supervise research staff; oversee operations of calling lab; foster a supportive, collaborative, and productive work environment across CSR;
- Sustain the reputation and visibility of CSR by maintaining involvement in preeminent professional organizations, presenting at conferences, and co-authoring peer-reviewed journal articles;
- Serve as Principal Investigator on research projects;
- Regularly carry out the following project tasks:
  - Prepare sampling designs; coordinate with Operations Manager and sampling vendors to procure sample
  - Develop survey instruments and oversee qualitative pretests
  - Prepare analysis and weighting plans; review all reporting and data deliverables
  - Present results to professional and nonprofessional audiences
  - Carry responsibility for project success, quality of data collection and project deliverables; resolve any project issues that arise; maintain positive relationships with clients
- Continue to carry out project duties of Project Coordinator and Research Analysts as needed.

Education and Training

4.   I attended Washington and Lee University and, upon graduation in 2011, received a B.A. *magna cum laude* in Sociology/Anthropology. I then attended the University of Virginia where I was awarded two degrees: an M.A. in Sociology in 2013 and a Ph.D in Sociology in 2018.

5.   During the time I was a graduate student at the University of Virginia, I was employed as a Graduate Research Analyst at CSR from 2013-2018. For much of that time, I also worked as a Teaching Assistant (from 2011 – 2016) for the Sociology Department, and taught courses such as Social Scientific Research Methods and Social Statistics.

6.   For six years, as a graduate assistant and a Senior Project Coordinator, assisted with conducting survey projects under the supervision of CSR senior staff.

7.   As the Director of CSR for the last four years, I have been a key contributor on over 100 funded survey projects. I am involved in all stages of the research process from study

design and instrument development through data collection to data preparation, statistical

analysis, and reporting.

8.   CSR's customers include agencies, government, researchers, and non-profits who

may want to conduct a reliable survey. Some of our former customers include local

governments; for example we recently concluded a survey for the City of Virginia Beach and are

currently conducting a survey for Albemarle County. We also regularly work with state agencies,

such as the Virginia Department of Education, Virginia Department of Health, and the Virginia

Department of Wildlife Resources. We also frequently work with other academic researchers,

both at UVA and beyond. Finally, we occasionally work with non-profits and community

groups.

9.   As a result of my education, training and experience, I have substantial expertise

in the field of designing surveys and collecting the survey data, that produce survey findings are

statistically valid, reliable, and can be generalized to the full population.

Reliable Surveys

10.   We strive to produce reliable surveys – surveys that yield the same or statistically

similar survey results when we follow the same research methods to readminister a survey and

we get the same results (with a specified level of confidence and precision). The elements of a

reliable survey include:

- Probability-based sampling design;
- A sample that has adequate coverage of the study population – meaning you are not leaving out relevant, eligible participants and you are not including participants that are not actually in your study population; and
- A valid questionnaire.

11.   In 2022, Fairfax County, Virginia hired CSR to conduct a public opinion survey

of area residents. The purpose of the survey was to determine area residents' use and anticipated

use of Fairfax County public parks, preferences related to firearms in these parks as well as other

locations and events such as farmers markets, and their corresponding perceptions of safety in

these spaces.

12.   I supervised all aspects of the services provided by CSR, which included sample

design and preparation, preparation of recruitment materials, data collection, and data

preparation. The survey was designed and collected in a way to ensure the findings were

comprehensive, statistically viable, and representative of area residents. Specifically, the survey

followed a probability-based[1], multi-mode[2] design so that the survey would yield comprehensive

and reliable results for this study population.

13.   The survey design followed the general principles and recommendations of the

"Tailored Design Method," which emphasizes intentionality at all stages of the research process

and mindfulness of the content, format, timing and mode of communication with respondents in

order to optimize response rate and accuracy.

14.   Our design included a series of U.S. postal mailings, including an advance letter,

multiple questionnaire packets, reminder postcards as well as reminder phone calling.

15.   Dr. Alexandra Filindra drafted the questionnaire, using existing validated national

measures, and Fairfax County approved it. The questionnaire included an experimental treatment

design with a total of four treatment groups, which were distributed randomly and evenly across

the sample.

---

[1] "Probability-based" refers to the sampling technique used for the survey. With a probability-based sample, the sample cases are randomly drawn from a sampling frame, representing our study population. Each case has a known, non-zero chance of selection.
[2] "Multi-mode" is the use of two or more different data collection modes within a single survey. For this survey, we administered the survey by mailed paper questionnaires and gave participants the option to complete the survey online as an alternative. In my experience, this combination is the most effective for collecting responses from general populations.

16.   Treatment groups 1 and 2 received a version of the questionnaire which asked about visiting parks and other outdoor spaces, in general. Treatment groups 3 and 4 received a version which asked respondents about visiting those same places assuming guns were permitted in these spaces.

17.   The CSR formatted each of the four versions of the questionnaire for paper distribution and programmed the instruments into Qualtrics, an online survey platform, for web administration. The corresponding version of the paper questionnaire was mailed to each sampled household based on their assigned treatment group.

18.   If a participant elected to complete the survey online, their assigned unique sample ID prompted the appropriate web version of the instrument that matched their assigned treatment group. The questionnaire was available in both English and Spanish, with CSR performing the Spanish translation of the instrument and contact materials.

19.   The population surveyed was comprised of residents from Fairfax County and the surrounding counties of Arlington, Loudoun, and Prince William and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park.

20.   We targeted this population utilizing an address-based sample[3] which was based on a simple random sample drawn from households across Fairfax and surrounding counties and cities.

21.   The sampling is based on the address lists compiled and maintained by the U.S. Postal Service, and the sample excluded addresses listed by the post office as businesses, vacant

---

[3] "Address based sampling" (ABS) is a probability-based frame of street addresses that rely on the U.S. Postal Service Computerized Delivery Sequence File (CDSF). The ABS frame provides nearly 100% coverage of all residential addresses in the country and can be used for in-person, mail, telephone, and multimode surveys.

or seasonal homes, and P.O. Box addresses. The sampling was randomly drawn from 3,000

households across Fairfax and the surrounding cities and counties. For a general population

survey, this methodology is typical.

22.   It was important for this study to use a probability-based sampling design since

tests of statistical inference are calculated on the assumption and requirement that a sample is

drawn using probability-based methods. In other words, because the sample is probability-based,

the survey results may be statistically generalized to the full population. Further, an address-

based sample was the best option to reach this study population as the totality of the sampling

frame provides nearly one-to-one coverage of the target population, whereas a phone or email-

based design would have issues of under coverage relative to the population.

23.   Table 1 below shows the locality representation within the Sample relative to

population distribution. It shows the sample distribution was very similar to the population

distribution.

Table 1. Locality Representation within Sample

County	Number of households in sample	Proportion of sample	Proportion of households in population[1]
Arlington County	376	12.5%	12.2%
Fairfax County	1304	43.5%	44.9%
Loudoun County	434	14.5%	14.9%
Prince William County	494	16.5%	16.2%
Alexandria City	279	9.3%	8.0%
Fairfax City	30	1.0%	1.0%
Falls Church City	18	0.6%	0.6%
Manassas City	48	1.6%	1.5%
Manassas Park City	17	0.6%	0.5%
Total	3,000	100%	100%

24.   Each household in the sample of 3,000 was mailed an advance letter, followed by the questionnaire packet approximately a week later. The questionnaire packet included a cover letter in both English and Spanish, a questionnaire booklet, and postage-prepaid return envelope.

25.   The four questionnaires that were mailed to the survey respondents are attached hereto as Exhibits 1-4. An equal number of the four versions were delivered randomly to respondents.

26.   On behalf of CSR, I supervised the mailing of the surveys. In addition to sending the surveys, we sent a thank you/reminder postcard, which included a short url and unique access code to allow participants to complete the survey online if they preferred.

27.   Additionally, we sent a second questionnaire packet to non-responding households. The second packet included a modified cover letter that also included a short url with unique access code to complete the survey online.

28.   After the mailing of the second packet, reminder phone calls were made to non-responding households for which a phone number was available. In addition to functioning as an additional reminder for residents to participate, the phone calling gave interviewers the opportunity to address residents' questions about the survey and upon request, email residents a direct survey link to complete the survey online.

29.   A third and final questionnaire packet was mailed to non-respondents. As a final point of contact with non-responding households, a closeout postcard was sent.

30.   A total of 457 survey responses were collected. This count includes both web and paper completions.

31.   Table 2 is a production timeline for data collection.

Table 2 Production Timeline for Data Collection

Task	Date
Mail advance letters	May 11, 2022
Mail first questionnaire packets	May 16, 2022
Mail thank you/reminder postcard with web referral	May 23, 2022
Mail second questionnaire, web-referral packets	June 6, 2022
Reminder phone calls to non-respondents	June 26, 2022 – July 1, 2022
Mail third questionnaire, web-referral packets	August 17, 2022
Mail closeout postcard with web referral	August 25, 2022
Close data collection	September 27, 2022

32.   In addition to paper surveys, we provided in our correspondence a short url with unique access code to complete the survey online. We tracked the mode of completion for the surveys. Table 3 shows the survey responses by mode of completion:

Table 3. Survey Responses by Mode (unweighted)

Mode of Completion	# of Responses	% of Responding Sample
Paper	362	79.2%
Web	95	20.8%
Total	*457*	*100%*

33.   The survey response rate for this survey was 15.2% which, in my opinion was an adequate response rate. I am satisfied that the survey collection was scientifically conducted in accordance with standards of my industry.

34.   CSR managed the data entry and cleaning of the data from the surveys. Responses were de-duplicated across the two modes of data collection to ensure only a single response per household was recorded. In instances when a household completed the questionnaire more than once, the most complete submission was accepted and other entries dropped from the data file.

35.   We recorded all final dispositions for the surveys collected which I converted to the following table:

Table 4. Final Dispositions

AAPOR Code	AAPOR Disposition	Counts	Percent
1.1000	Complete	450	15.0%
1.2000	Partial	7	0.2%
2.1000	Refusal (Opt-out or return of blank questionnaire)	9	0.3%
2.3100	Deceased respondent	1	0.0%
3.1900	Non-interview – Nothing returned	2,386	79.4%
3.2500	Bad mailing address	147	4.9%
	Total	3,000	100.0%

36.   Additionally, I took steps to ensure the data collected is accurate. I oversaw the process and CSR managed the tracking of responses and performed data entry for all paper

completions. Data entry was carried out in Qualtrics. Data entry validation was performed on approximately 10% of submitted questionnaires. CSR carried out the preparation of the data file, which required the exporting, labeling, and cleaning of the data. CSR also performed post-stratification weighting on the final data.

37.   Data cleaning is where we review the raw data files, adjust labeling, review open ended responses, and drop empty cases. If there is more than one data file, we merge and deduplicate the responses.

38.   In addition to cleaning the data and under my supervision, the CSR performed post-stratification weighting on the final data. Post-stratification weighting adjusts the survey data to match the population on known demographics. By doing so, representativeness of the sample data is improved by directly aligning it with the population on select characteristics. Further, to the extent that answers to survey questions are related to the demographic variables included in the weighting, these post-stratification adjustments also reduce biases in survey estimates.

39.   CSR weighted the data on five variables, selected in consultation with Dr. Filindra: race, age, sex, education level, and political affiliation. The statistical method called 'rim weighting' or 'raking' was used to adjust the sample proportions on these variables to closely approximate the population proportions across the demographic characteristics specified above. The final post-stratification weight was trimmed to reduce extreme weighted values and in turn, reduce sampling variance.

40.   In Table 5 below, I report the Sample and Population Distributions across Weighting Variables:

Table 5. Sample and Population Distributions across Weighting Variables

	Sample Unweighted		Sample Weighted		Population Parameters	
	N	%	N	%	N	%
Race						
White alone	297	72.3%	256	61.8%	1,154,574	61.5%
Black or African American alone	25	6.1%	44	10.7%	228,321	12.2%
Asian alone	40	9.7%	68	16.4%	305,611	16.3%
Some other race alone	36	8.8%	24	5.8%	97,547	5.2%
Two or more races	13	3.2%	22	5.3%	90,210	4.8%
Total	*411*	*100%*	*413*	*100%*	*1,876,263*	*100%*
Age						
18 - 29	27	6.3%	79	18.9%	374,689	20.0%
30 - 39	46	10.8%	80	19.2%	388,920	20.7%
40 - 49	69	16.2%	86	20.5%	363,697	19.4%
50 - 59	76	17.8%	70	16.7%	328,484	17.5%
60 - 69	88	20.6%	55	13.1%	231,365	12.3%
70 - 79	81	19.0%	32	7.6%	125,488	6.7%
80 and older	40	9.4%	17	4.0%	63,620	3.4%
Total	*427*	*100%*	*419*	*100%*	*1,876,263*	*100%*
Sex						
Male	220	52.1%	197	47.5%	922,081	49.1%
Female	202	47.9%	217	52.5%	954,182	50.9%
Total	*422*	*100%*	*414*	*100%*	*1,876,263*	*100%*
Education level[4]						
Less than HS graduate or HS degree	25	5.7%	72	16.8%	349,678	20.9%
Some college, no degree	38	8.7%	54	12.5%	224,244	13.4%
Associate's degree	20	4.6%	26	6.0%	97,555	5.8%
Bachelor's degree	145	33.3%	144	33.3%	518,239	30.9%
Graduate or professional degree	207	47.6%	136	31.5%	485,589	29.0%
Total	*435*	*100%*	*432*	*100%*	*1,675,305*	*100%*
Political Affiliation[5]						
Democrat	181	69.3%	164	69.3%	893,074	70.4%
Republican	80	30.7%	73	30.7%	376,049	29.6%
Total	*261*	*100%*	*237*	*100%*	*1,269,123*	*100%*

41.   CSR reviewed the survey results and compiled the results in a spreadsheet. Exhibit 5 is the final weighted data spreadsheet which accurately represents the survey results that were collected by CSR under my supervision.

42.   The margin of error for the unweighted sample is approximately +/- 4.6 percent at the 95 percent level of confidence. This means that if the survey was repeated with 100 different random samples, the results of the survey would be within 4.6 percentage points of these same results in 95 out of those 100 iterations of the survey.

43.   The margin of error is affected by the weighting of the data, a process which creates a design effect. When we take this study's design effect into account, the margin of error for the weighted data adjusts to +/- 6.5% at the 95 percent level of confidence. The design effect due to weighting is 2.01.

44.   Every question on the survey has its own margin of error. The overall calculation presented here is for a question answered by all respondents with a 50-50 response distribution. Margins of error would be larger for questions answered by a smaller number of respondents or for subgroups in the data. On the other hand, questions with a lopsided response pattern (e.g. an 80-20 response pattern) and answered by all respondents will have a smaller margin of error.

45.   Due to the methods used in designing and collecting the survey data, it is my opinion that the survey findings are statistically valid, reliable, and can be generalized to the full population.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on January 4, 2024.

_____
KARA FITZGIBBON

4893-6522-5114, v. 1